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(54) **APPAREL WITH RAISED COURSE CREASE**

(75) Inventors: **Monica Litt**, Portland, OR (US); **Derek A. Costarella**, Portland, OR (US)

(73) Assignee: **NIKE, Inc.**, Beaverton, OR (US)

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D04B 1/24	(2006.01)

(52) **U.S. Cl.** **2/129**; 2/116; 66/171

(58) **Field of Classification Search** ..... 2/129, 60, 2/98, 116, 117, 131, 132, 133, 134, 135, 2/136, 139, 140, 141.1, 141.2, 142, 143; 66/171, 170, 172 R, 173, 176

See application file for complete search history.

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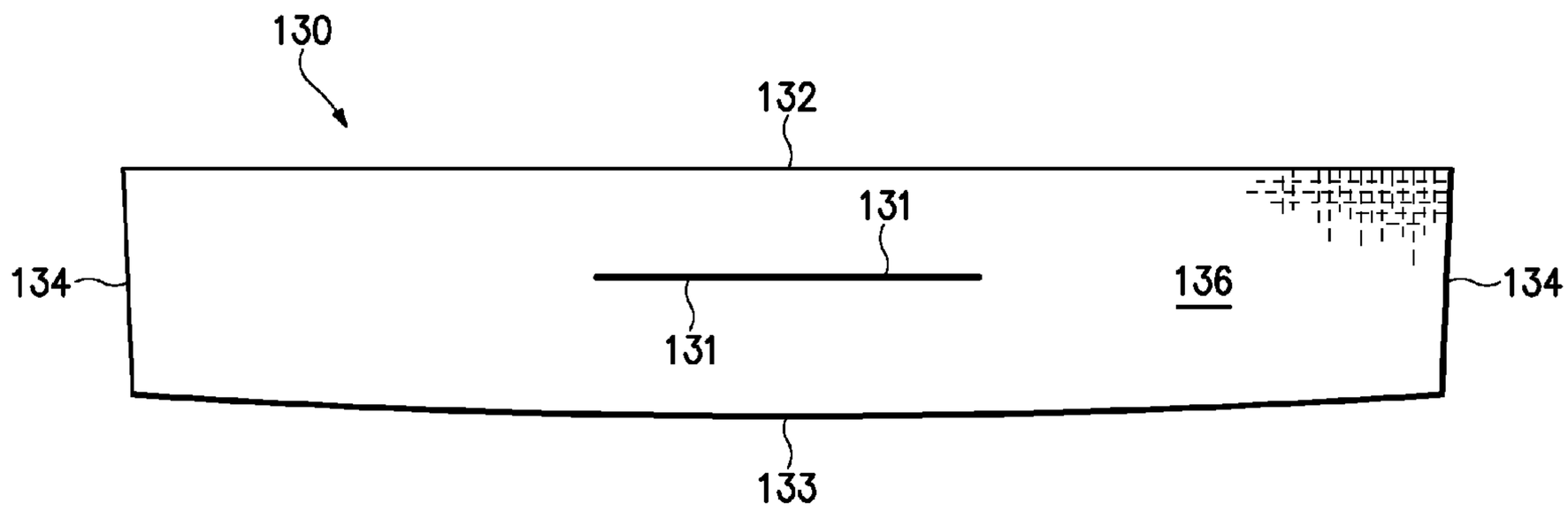
Primary Examiner — Alissa L Hoey
(74) *Attorney, Agent, or Firm* — Plumsea Law Group, LLC

(57) **ABSTRACT**

An article of apparel may include a textile element that defines a crease. The textile element may be knitted to have a first course and a second course that are adjacent to each other in some areas of the textile element and spaced from each other by a raised course in other areas of the textile element. The crease extends along the third course and has a length that is substantially equal to a length of the third course. In manufacturing the textile element, the raised course may be formed between portions of the first course and the second course through a knitting process, such as a flat knitting process.

29 Claims, 18 Drawing Sheets



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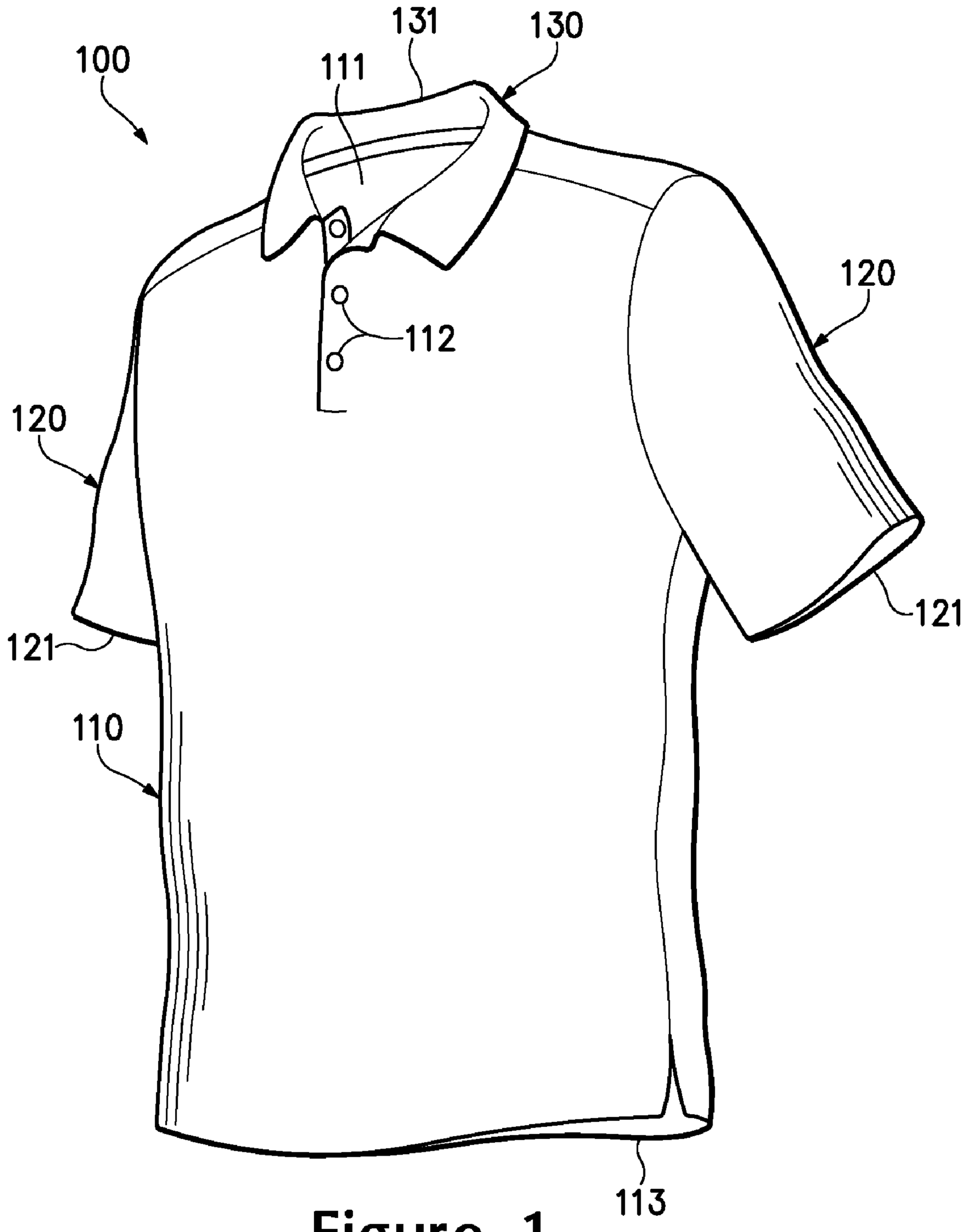


Figure 1

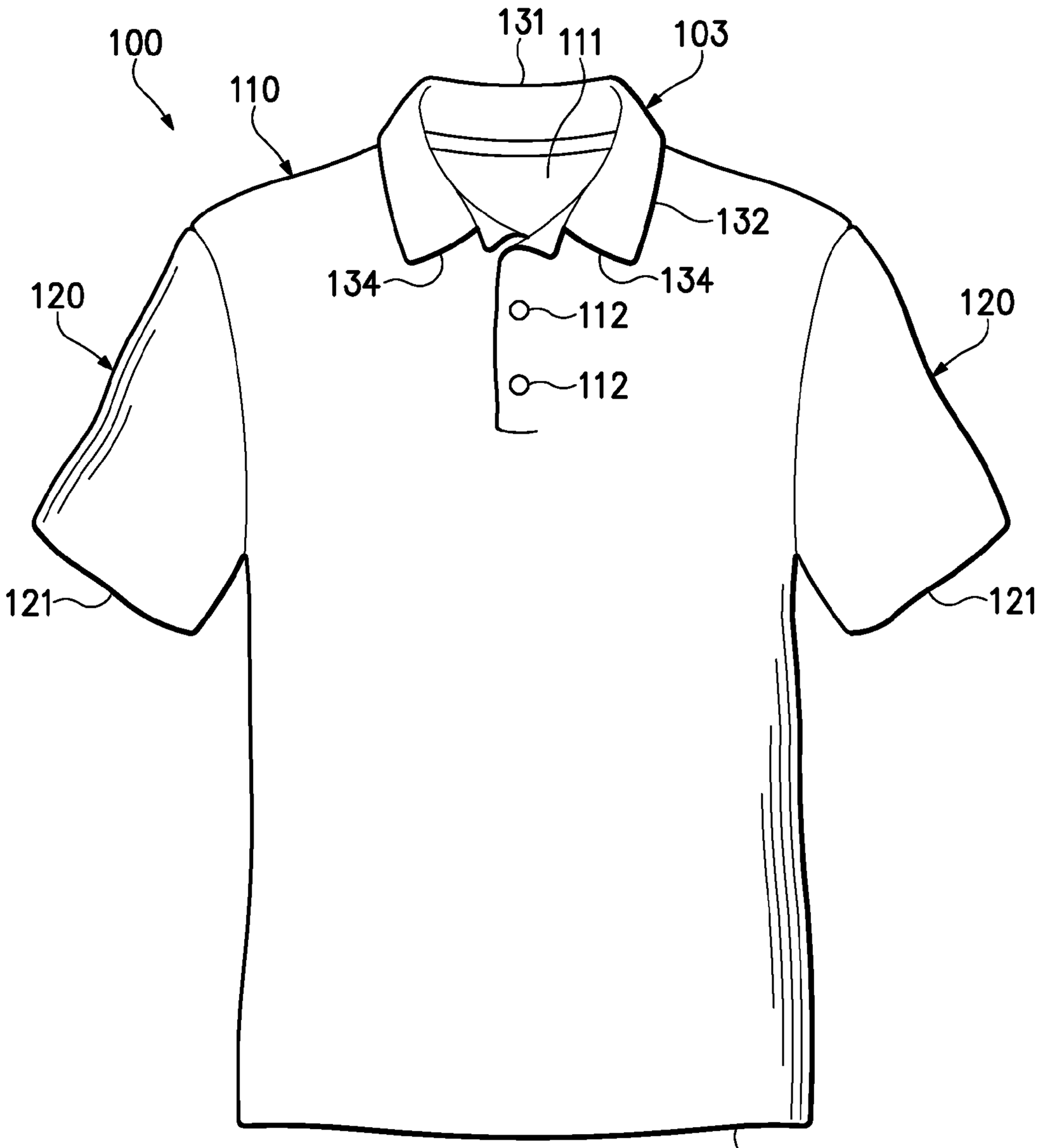
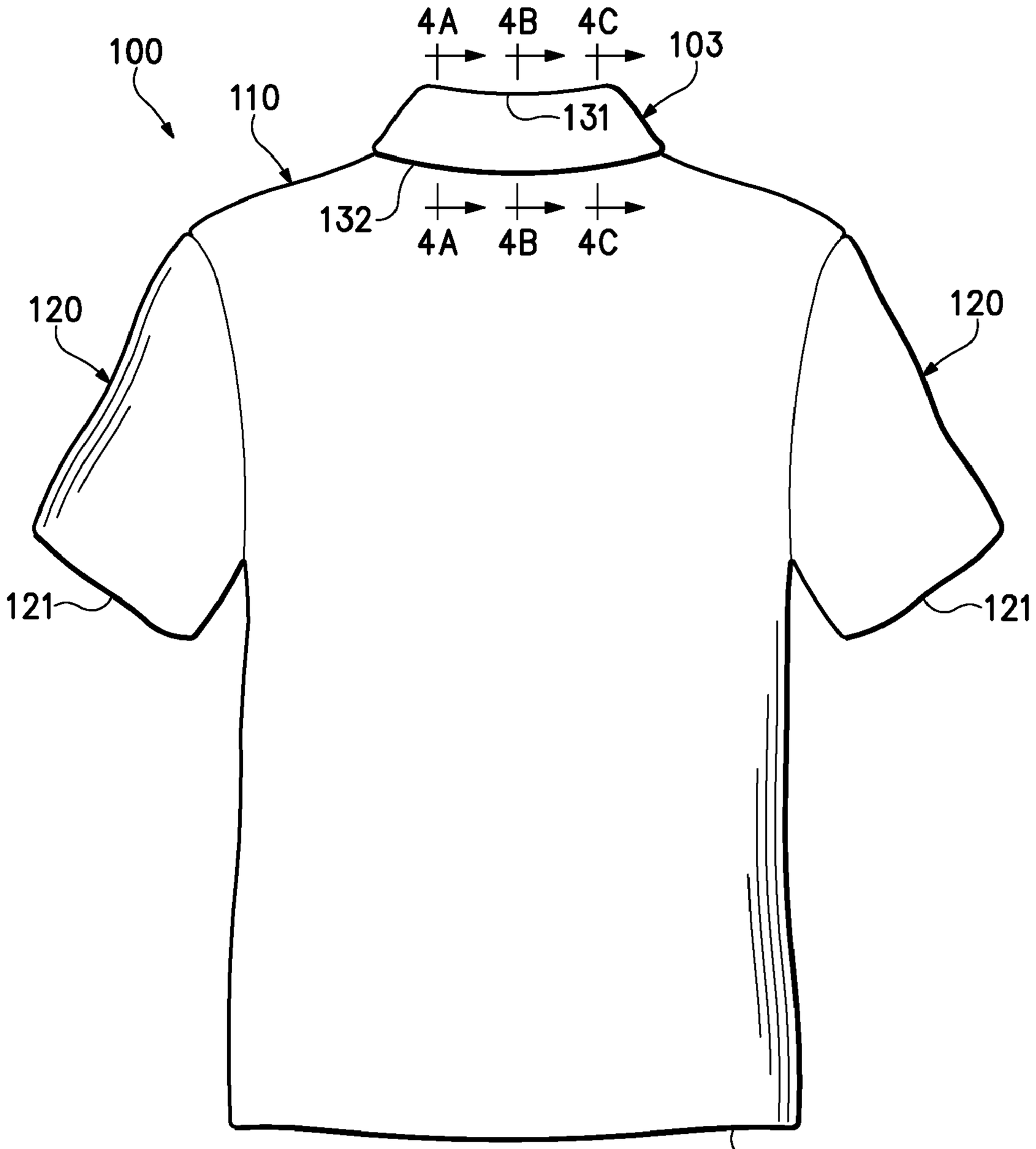


Figure 2



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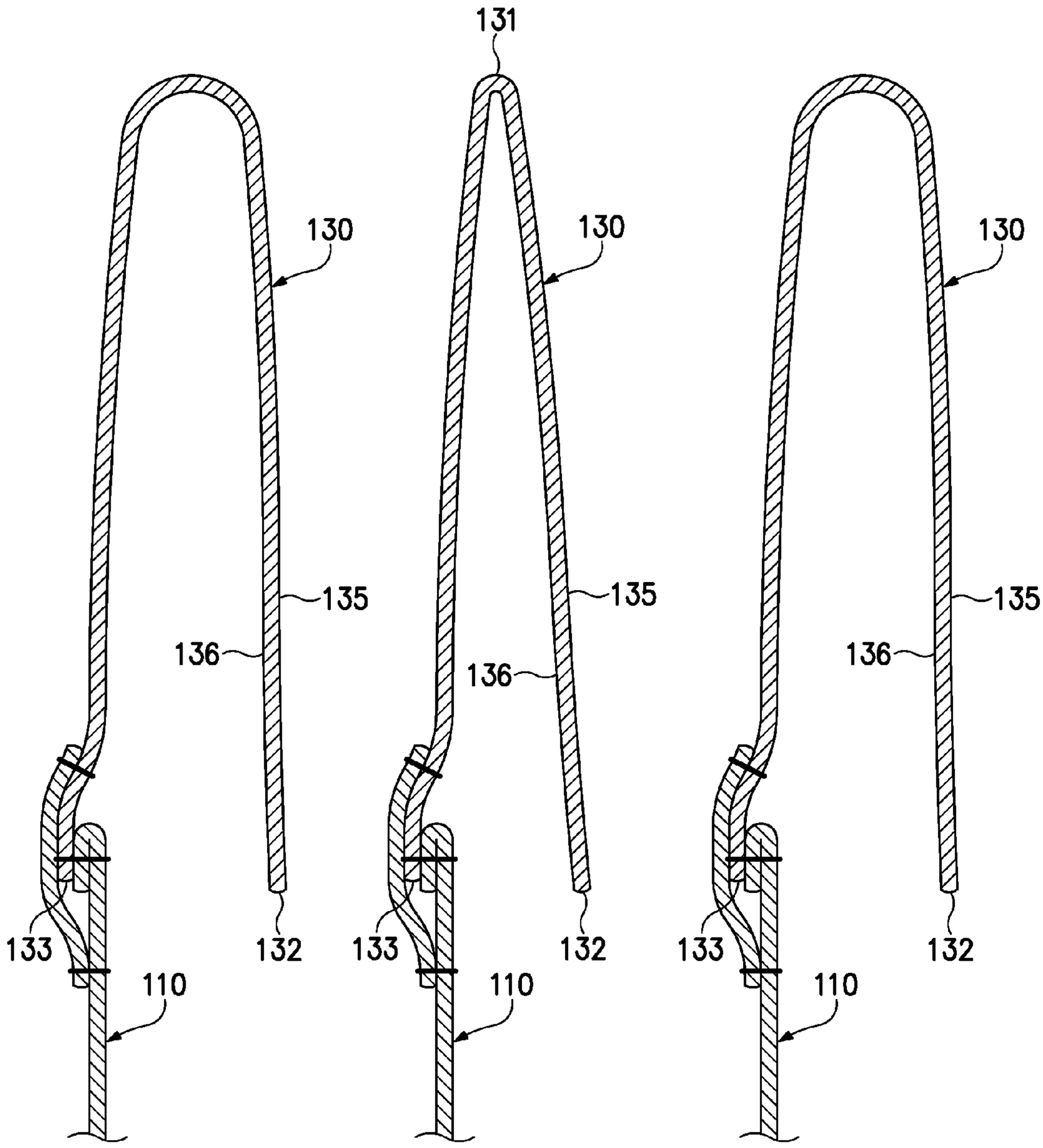


Figure 4A Figure 4B Figure 4C

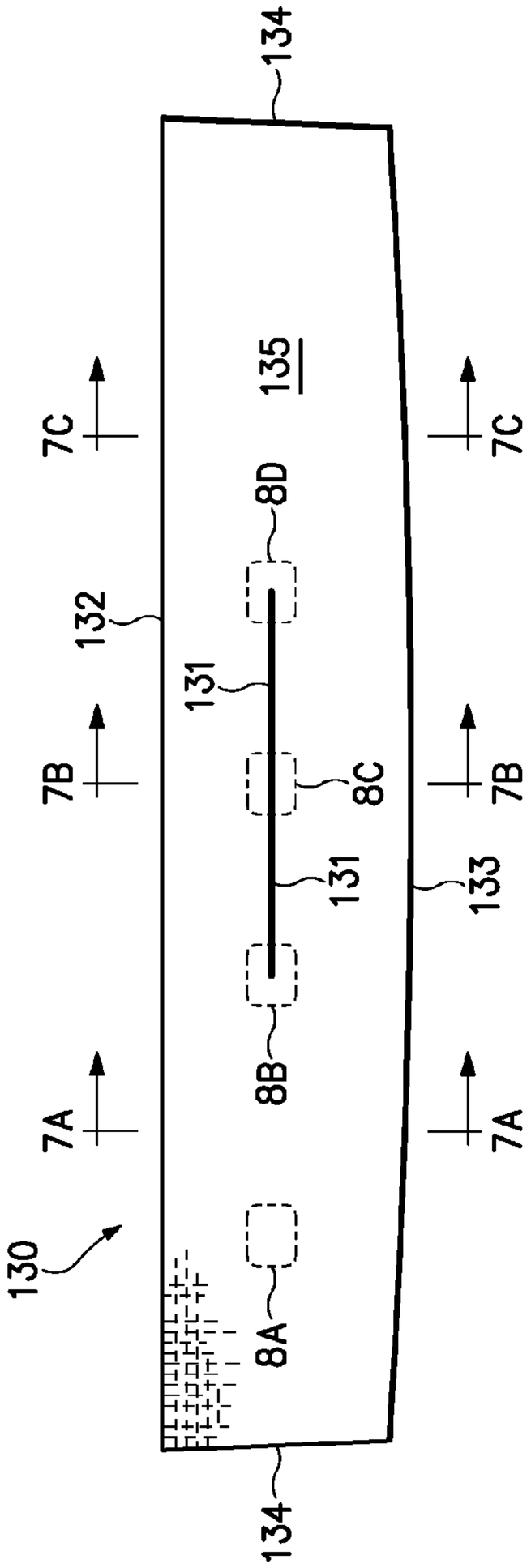
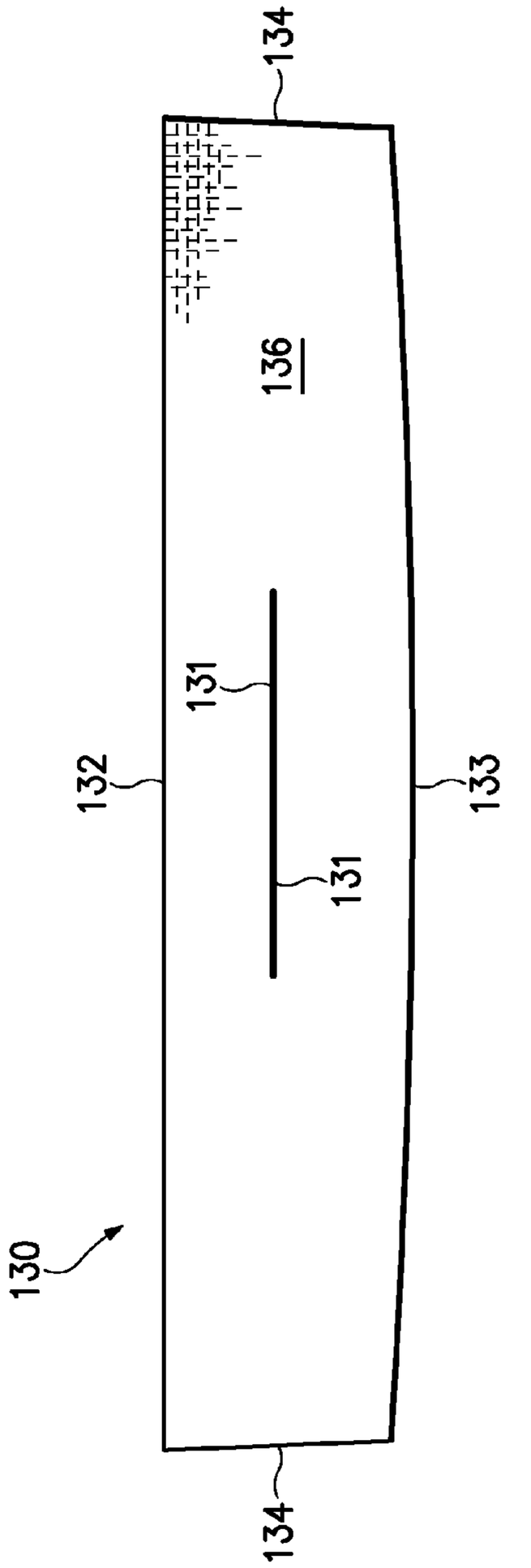


Figure 5



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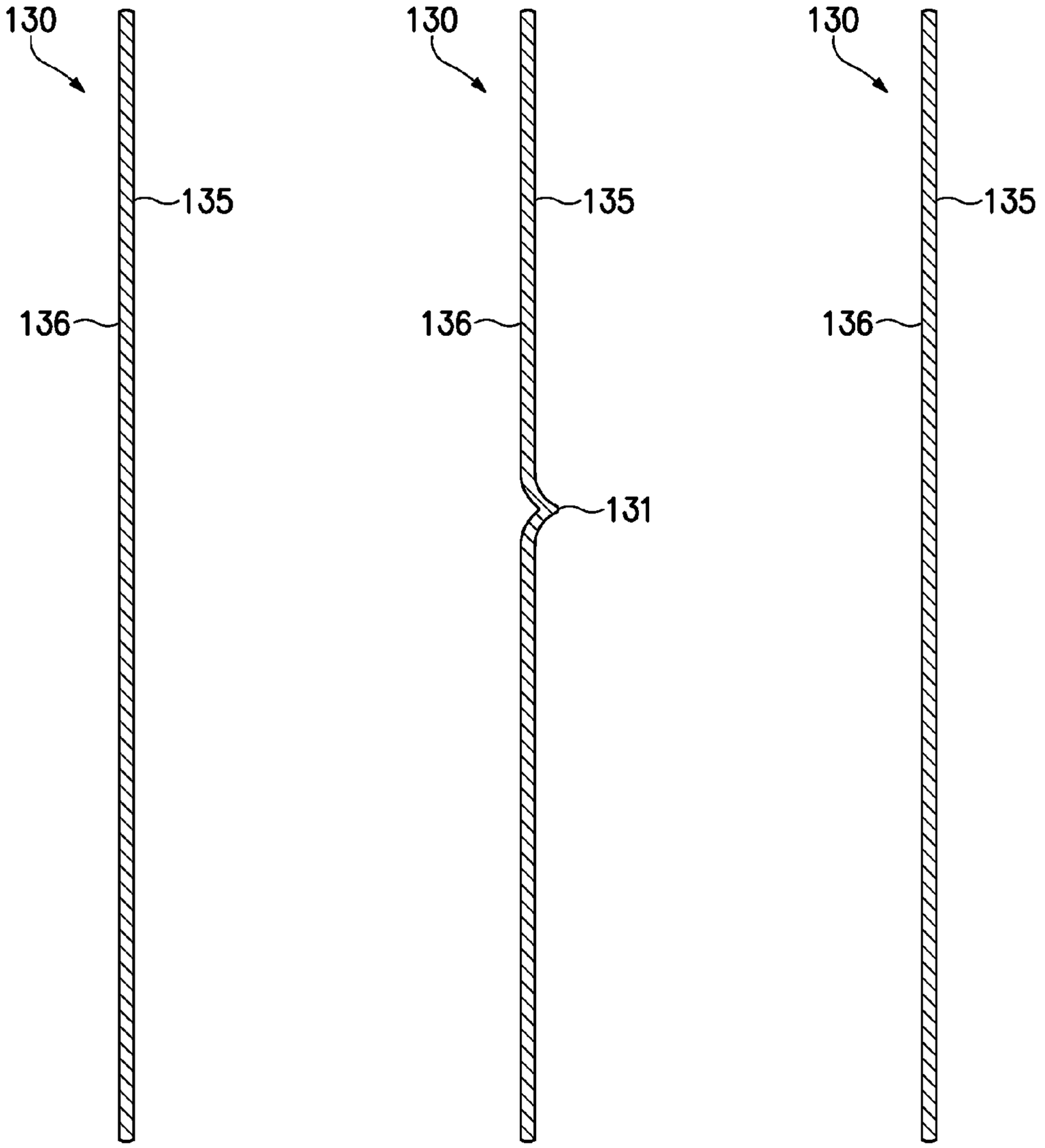


Figure 7A Figure 7B Figure 7C

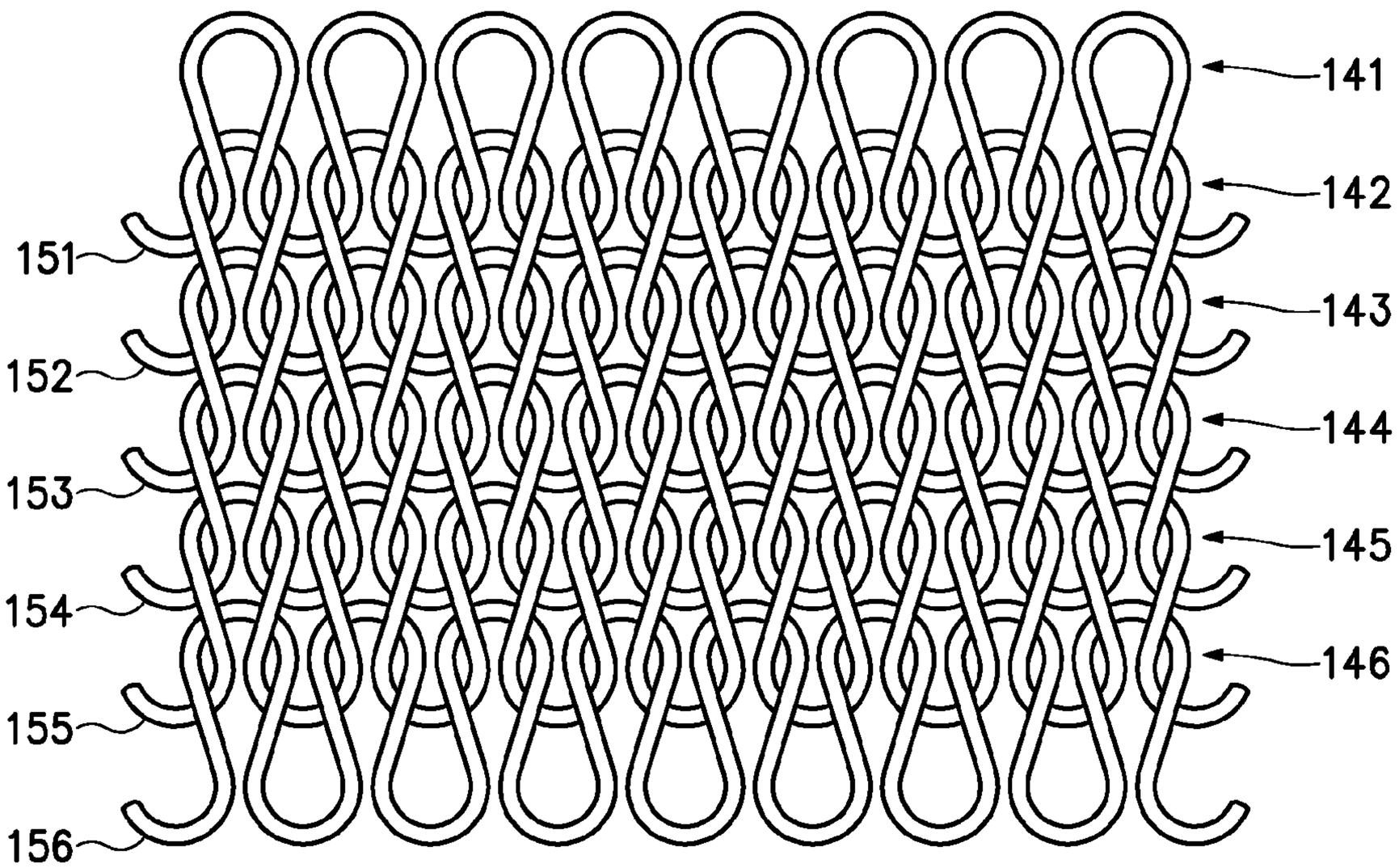
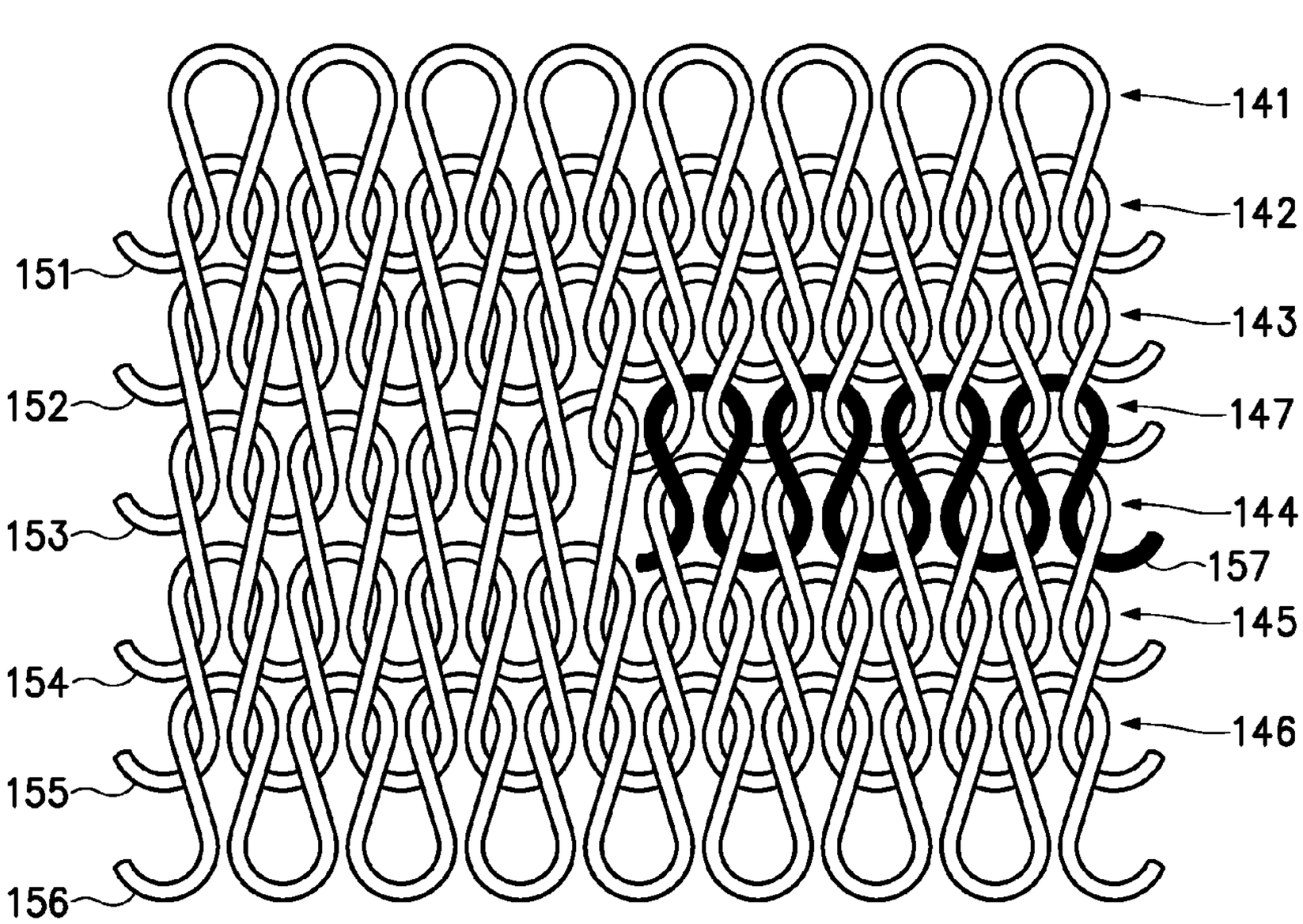


Figure 8A



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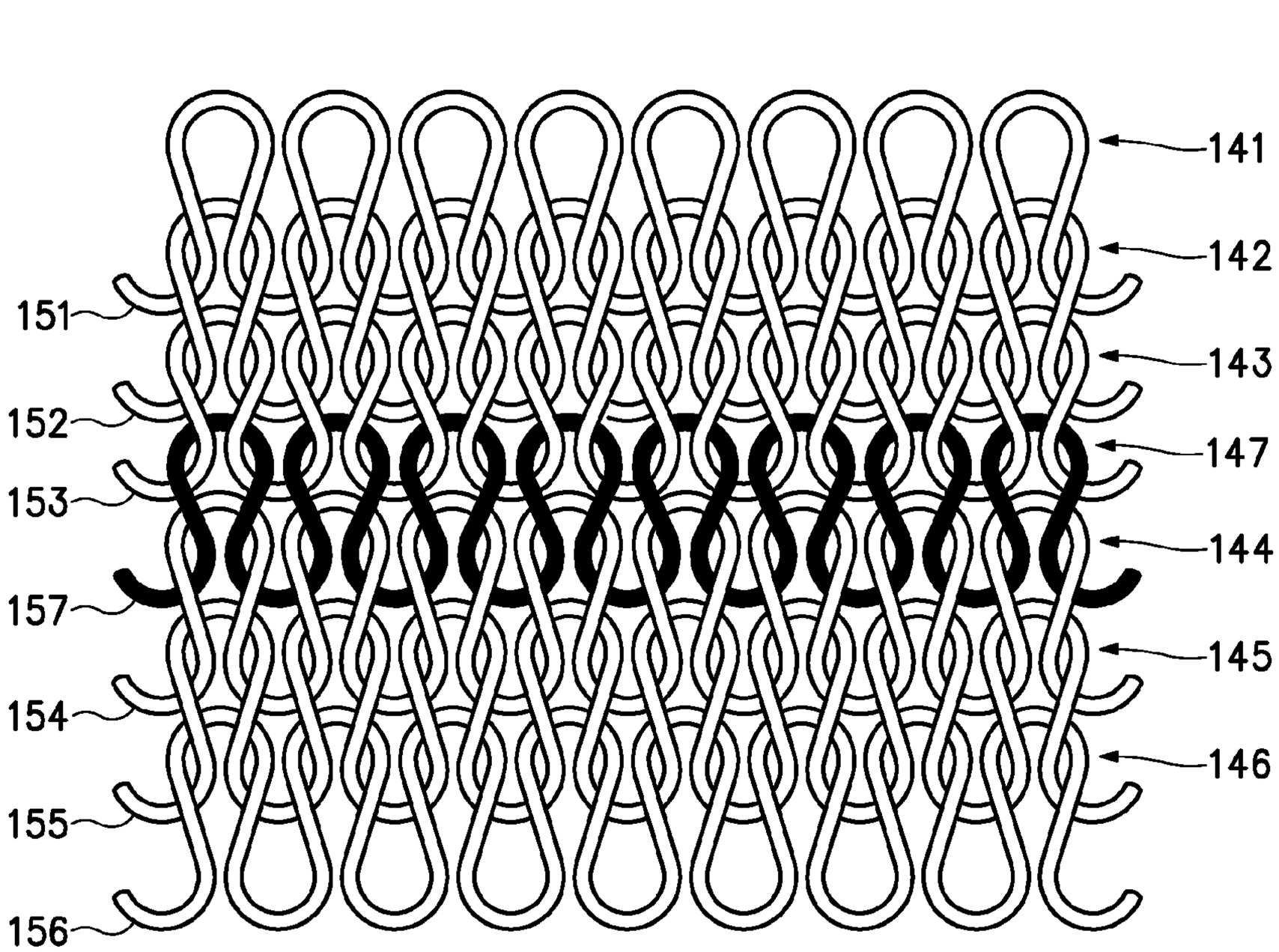
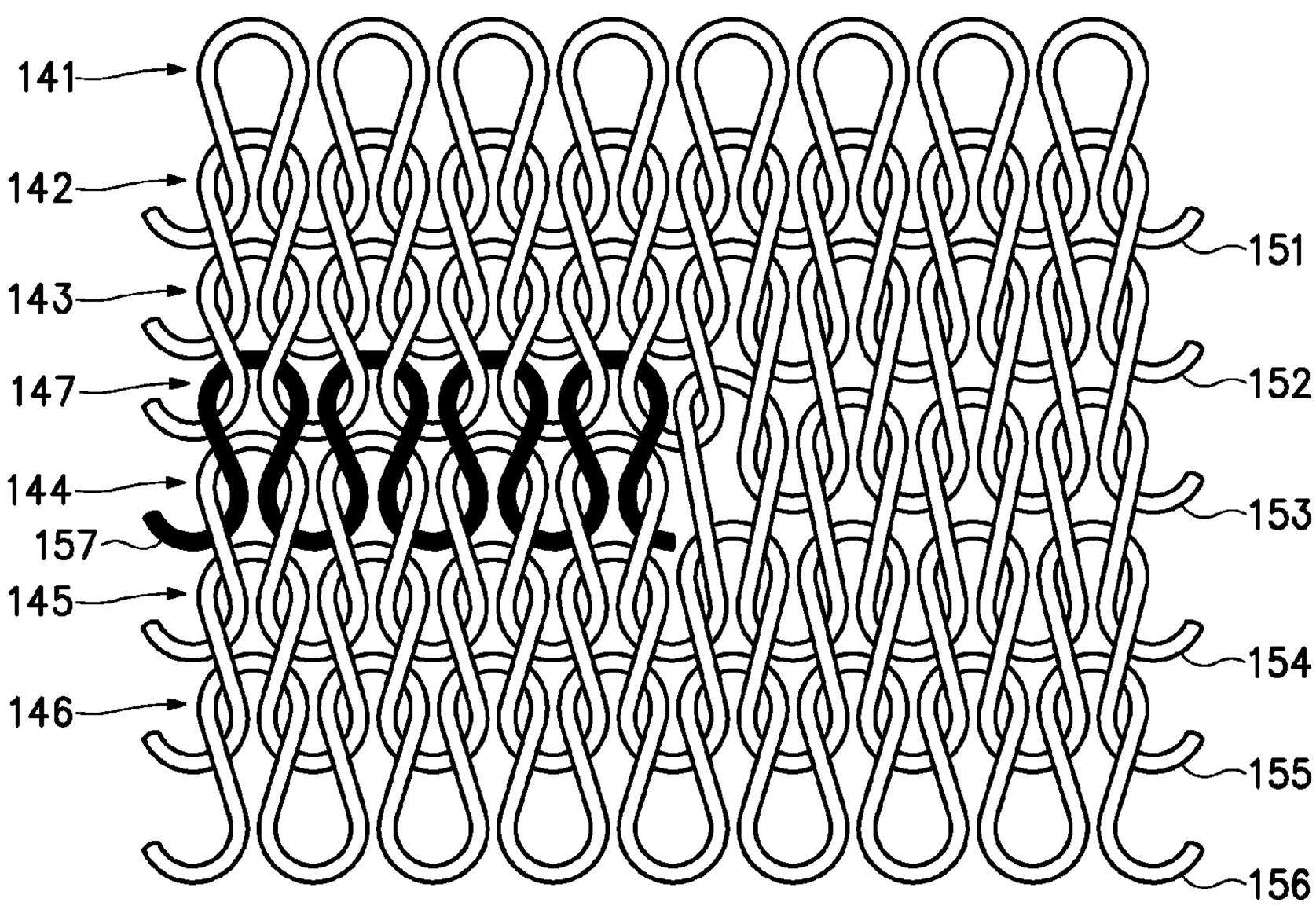


Figure 8C



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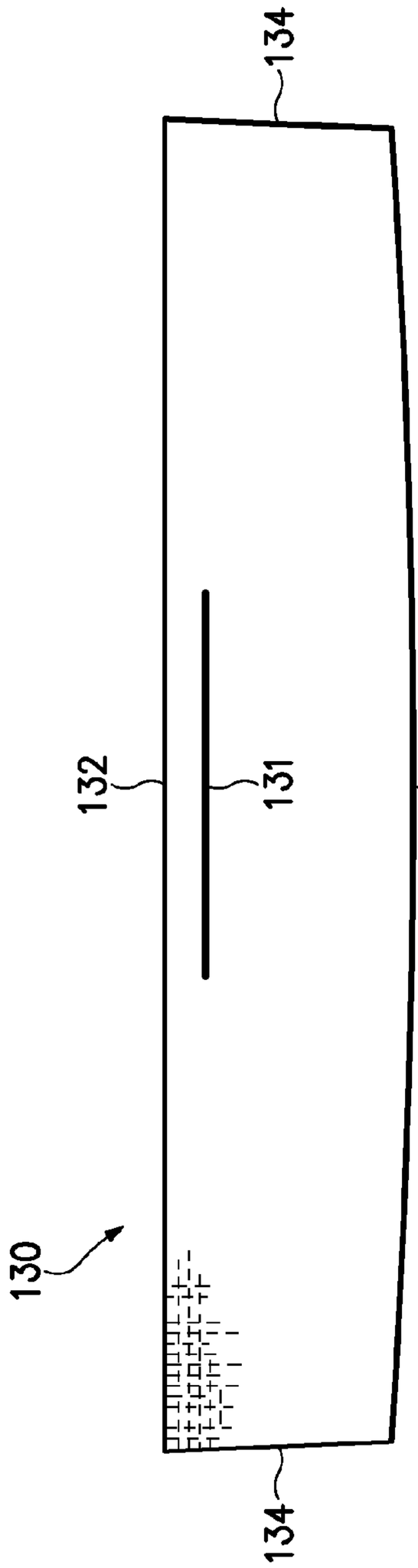
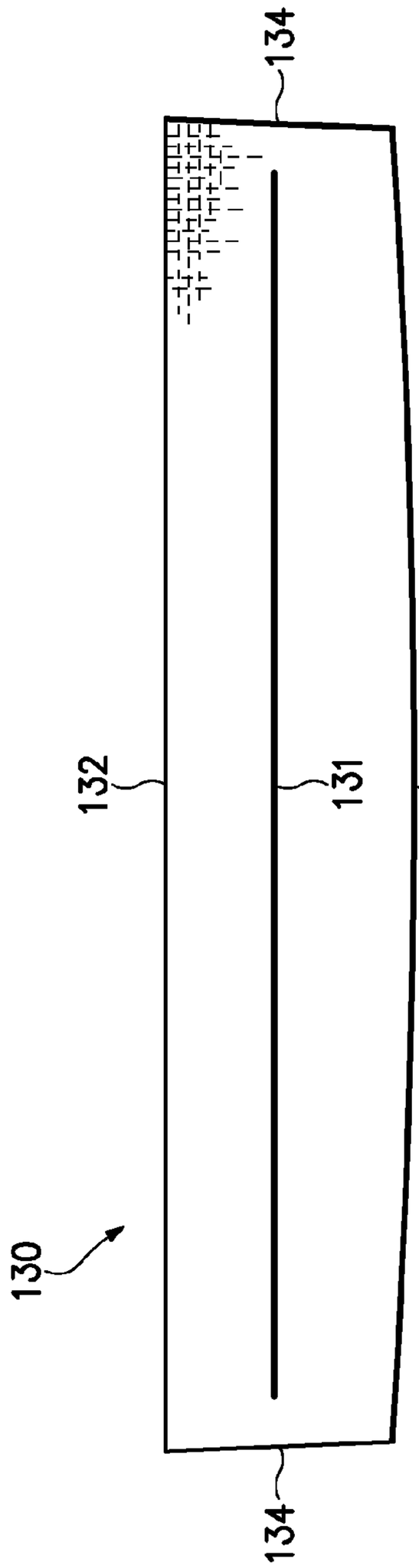


Figure 9A



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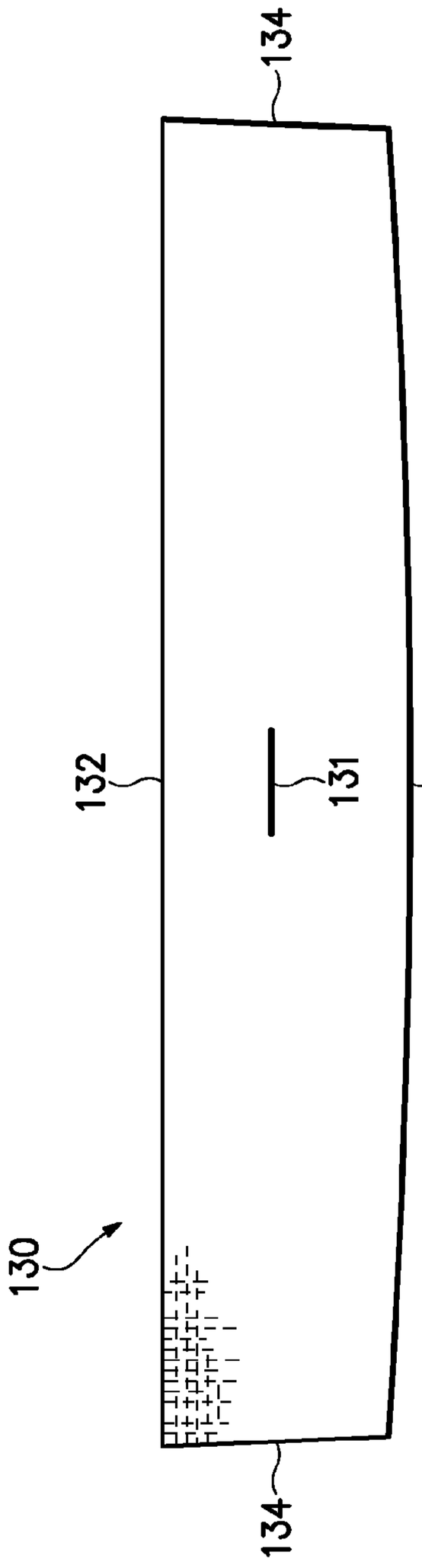
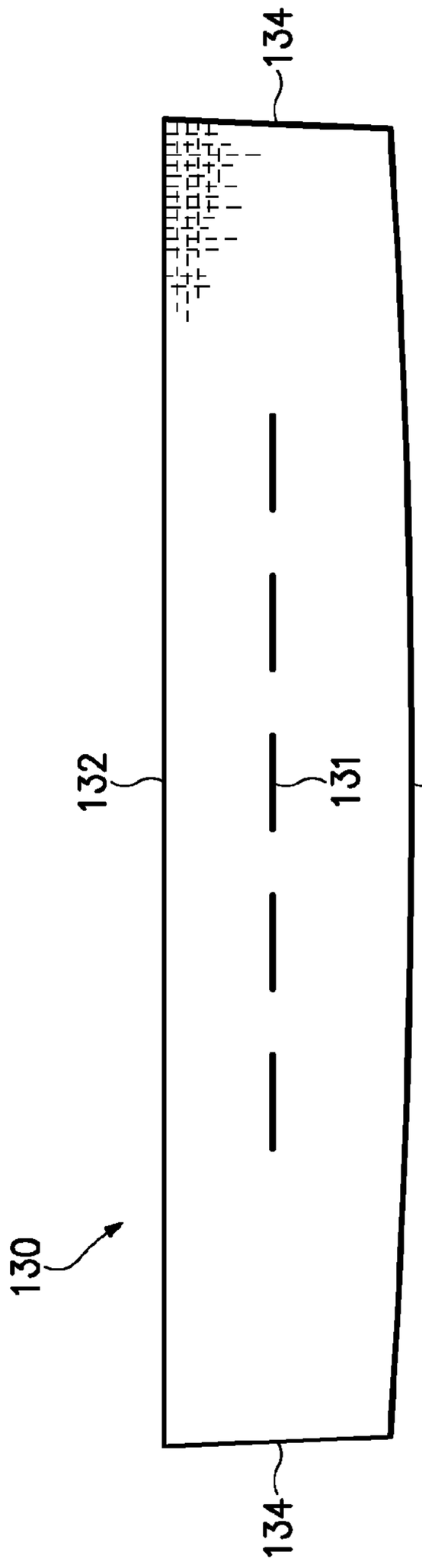


Figure 9C



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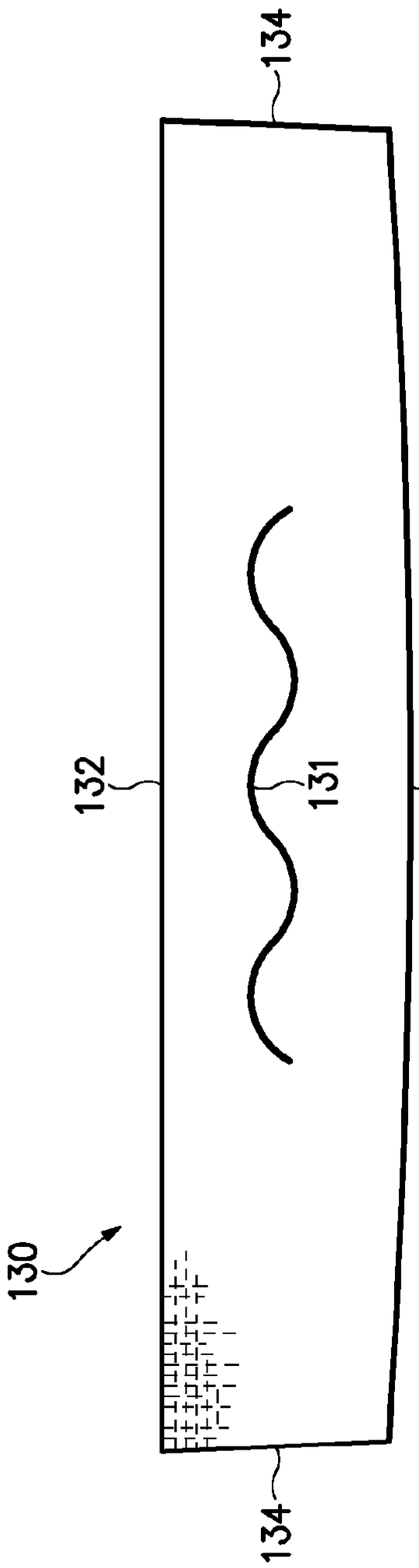

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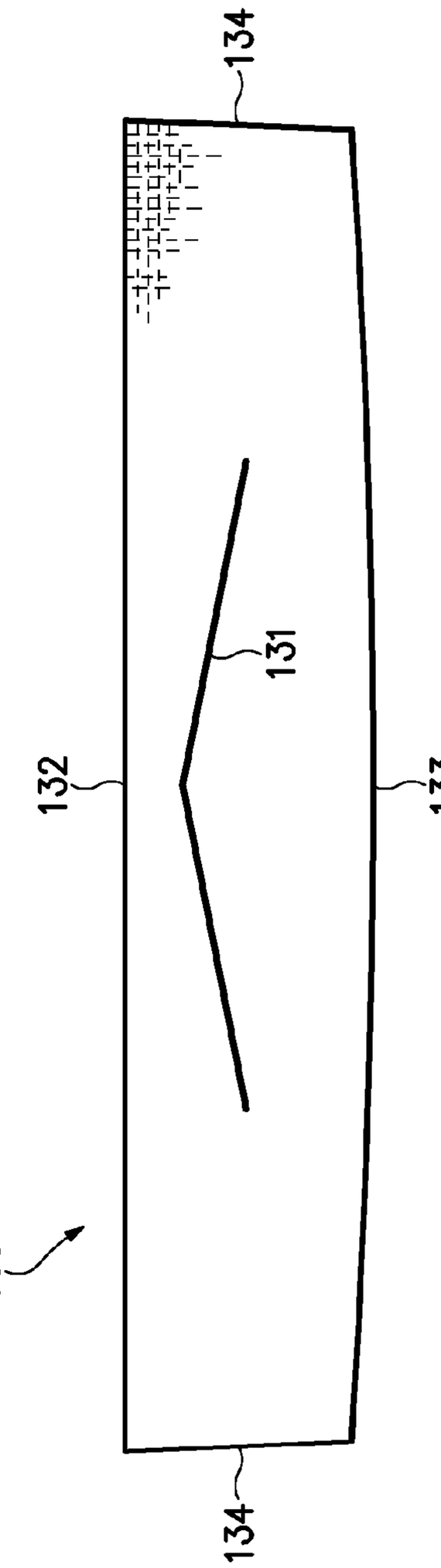

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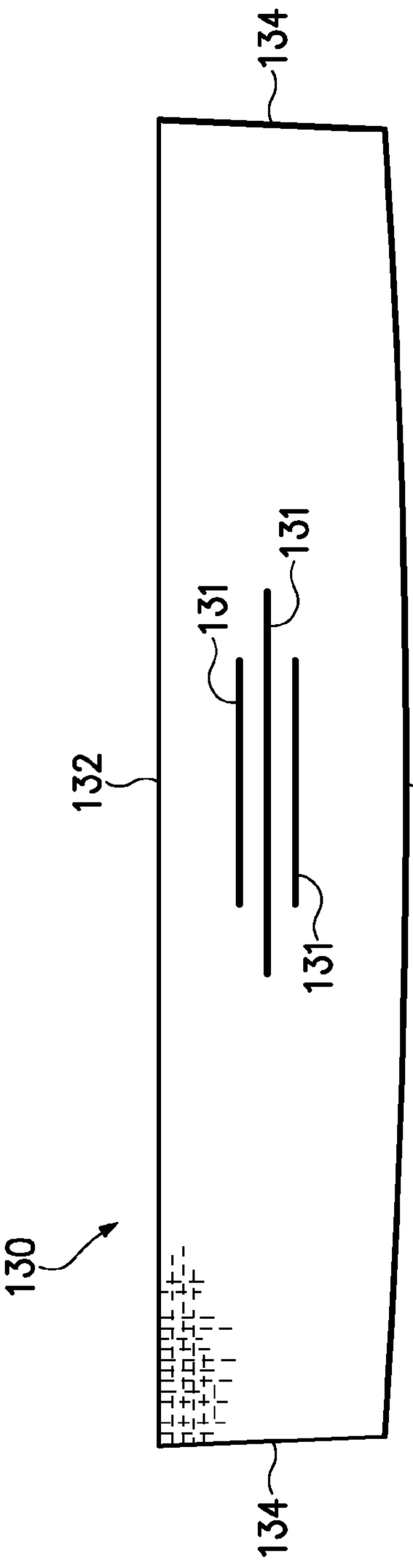


Figure 9G

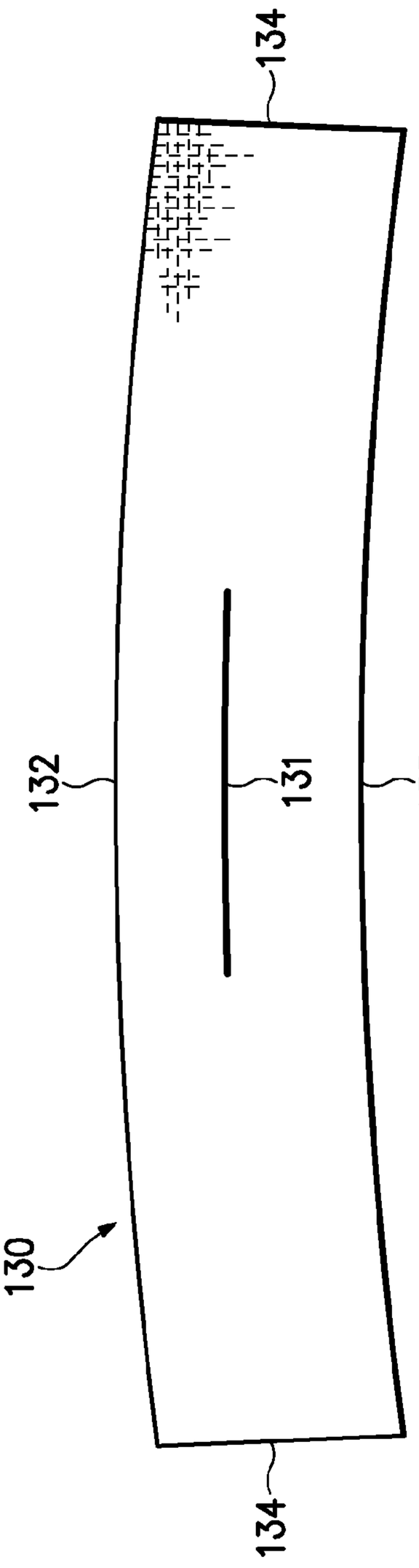


Figure 9H

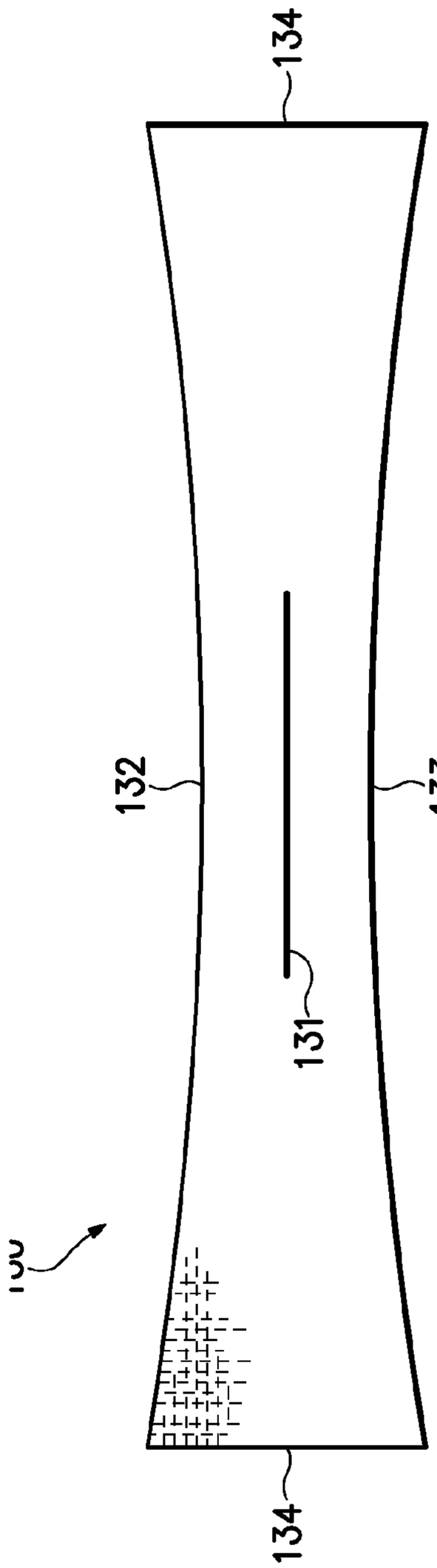


Figure 9I

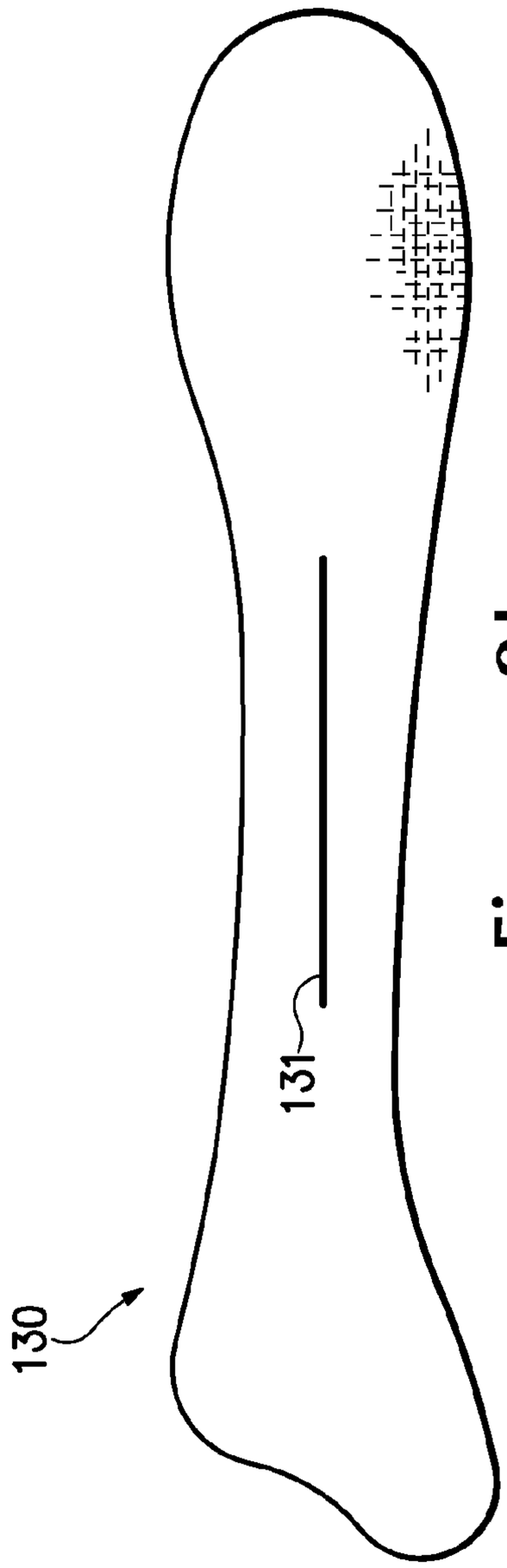


Figure 9J

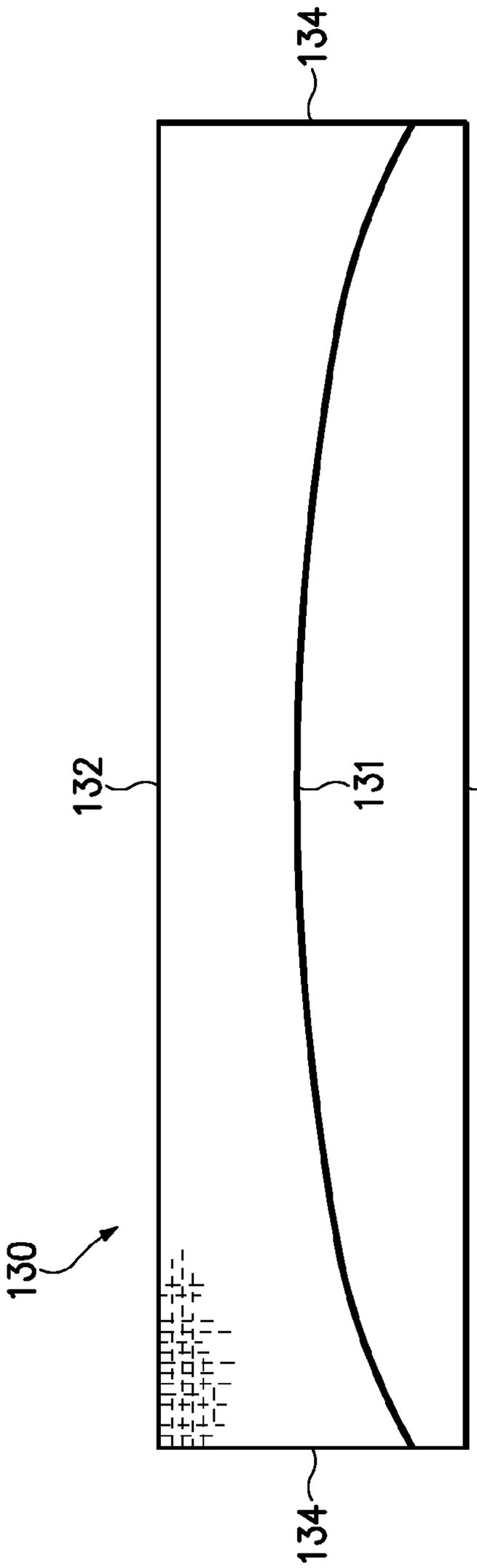


Figure 9K

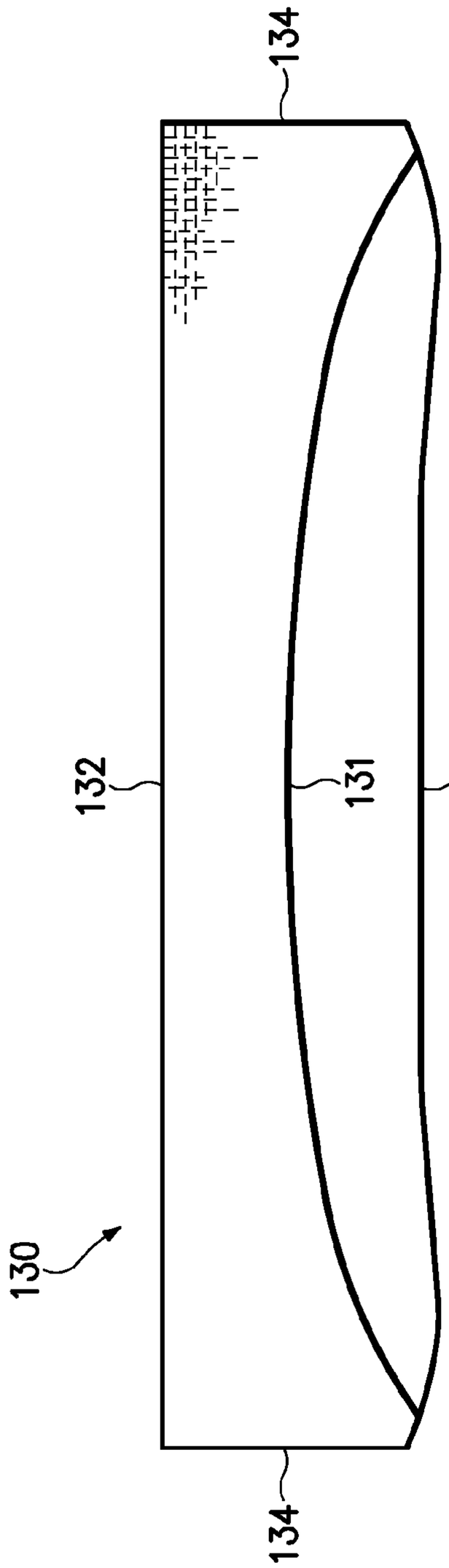
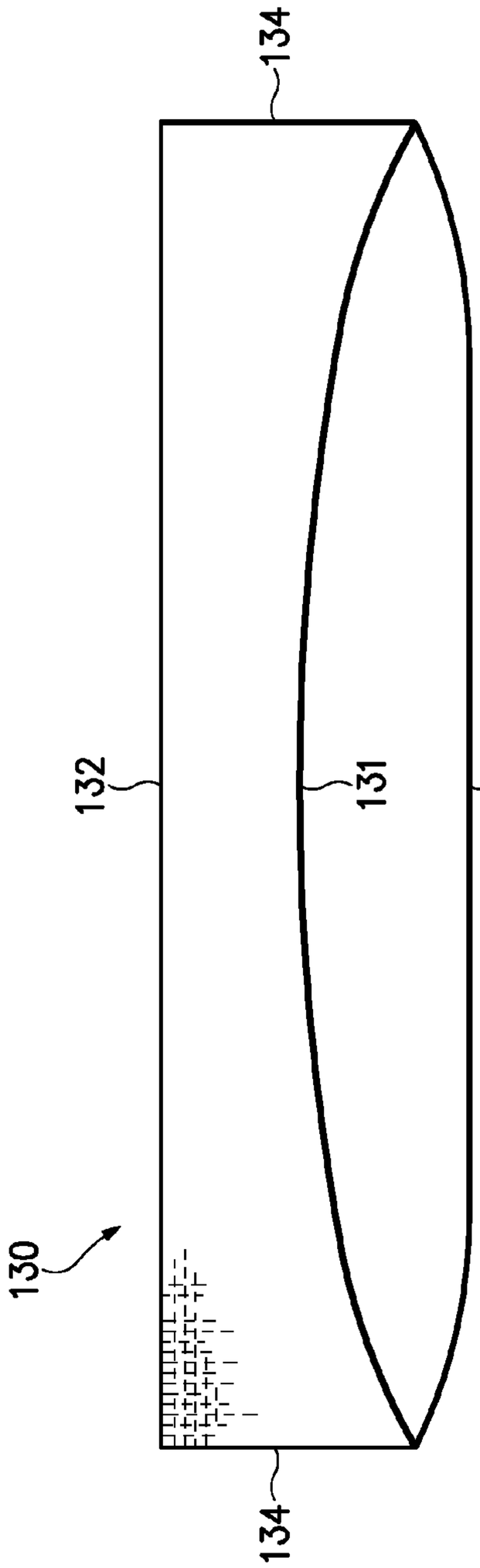


Figure 9L



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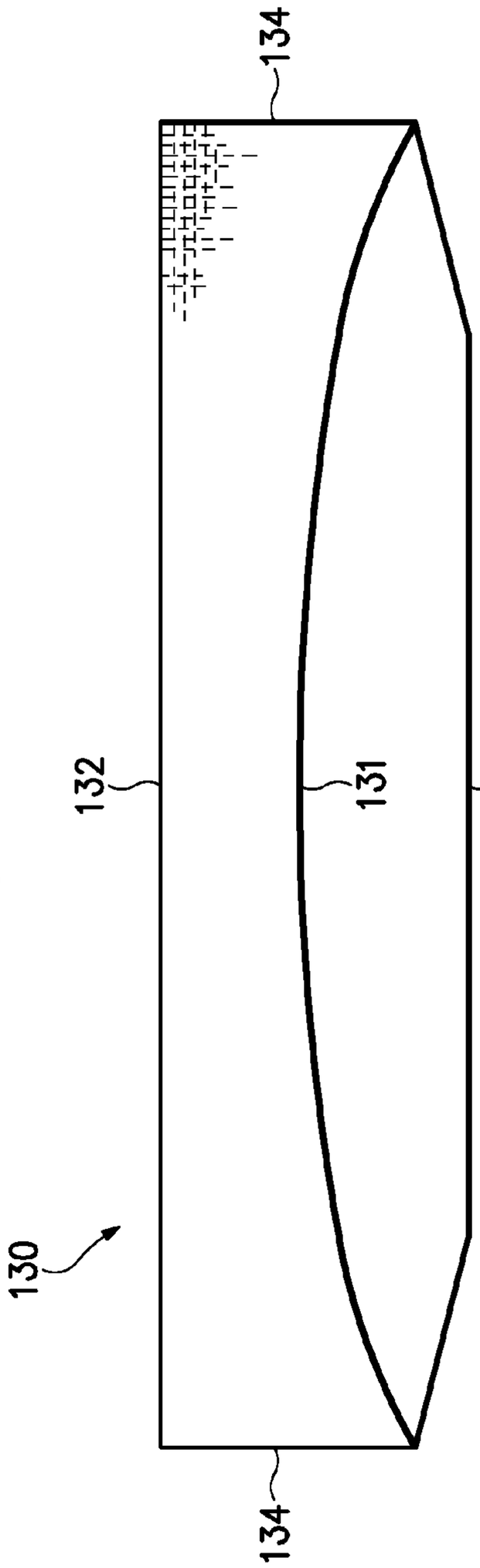

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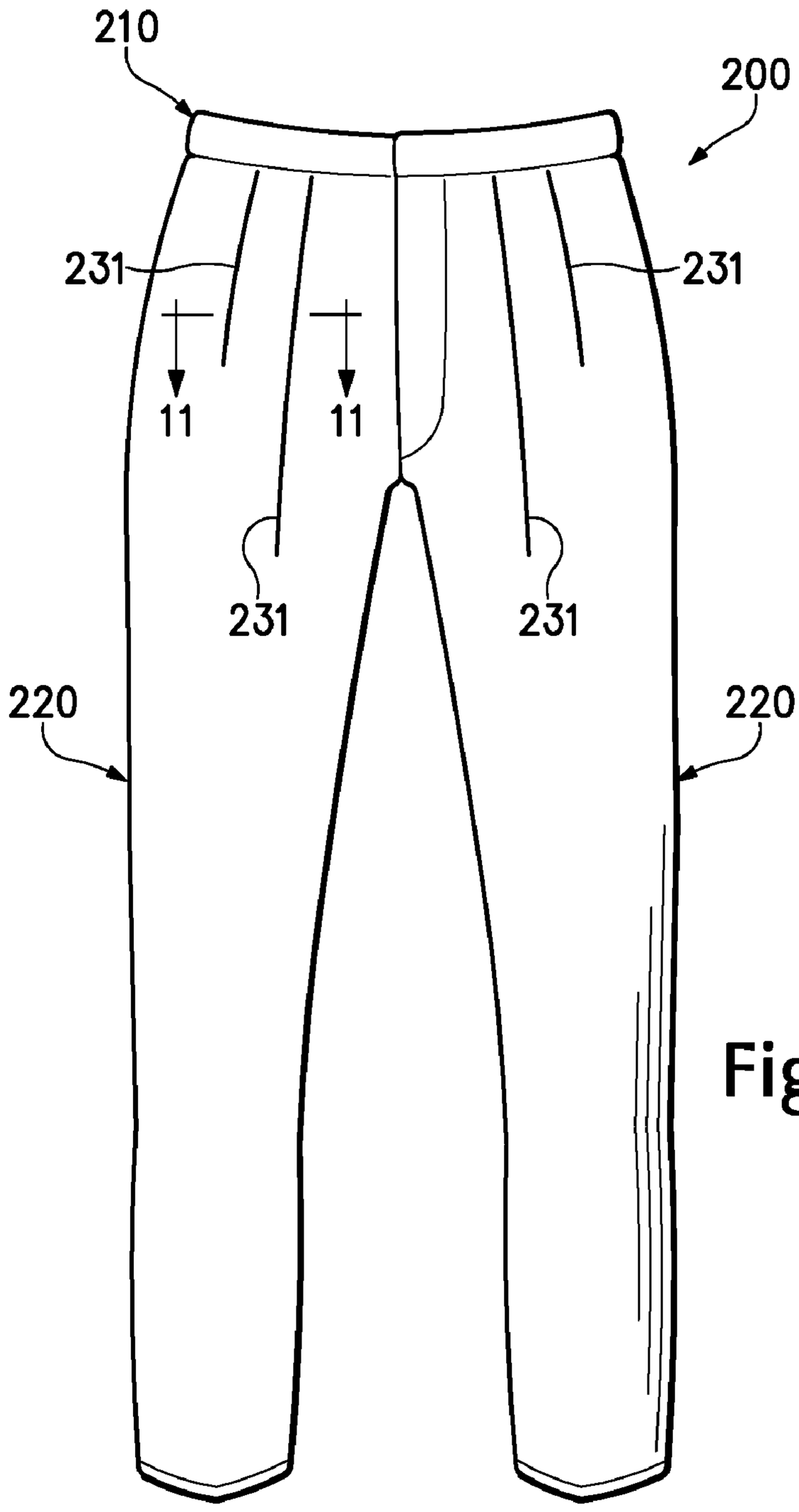

Figure 10

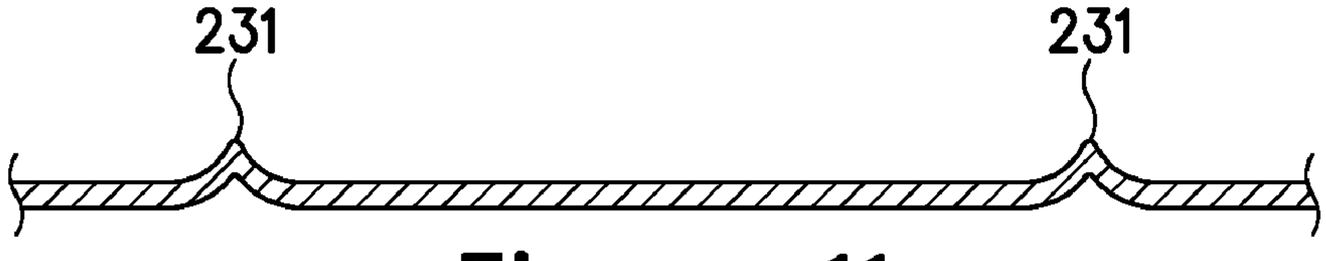

Figure 11

APPAREL WITH RAISED COURSE CREASE

BACKGROUND

Many articles of apparel incorporate creases that enhance the appearance or functionality of the apparel. Shirt collars, for example, incorporate creases that impart an ironed or freshly-laundered appearance. Many pairs of pants, for example, incorporate creases that expand and contract to provide extra room and a freedom of movement for the wearer.

SUMMARY

An article of apparel is disclosed below as including a textile element that defines a crease. In some configurations, the textile element has a first course and a second course that extend toward a pair of opposite edges of the textile element. The first course and the second course are adjacent to each other in areas of the textile element that are proximal to the opposite edges. The textile element also includes a third course that is positioned between the first course and the second course. The crease extends along the third course and has a length that is substantially equal to a length of the third course.

A method of manufacturing a textile element with a crease is also disclosed below. In some configurations, the method includes forming a first course that extends between opposite edges of the textile element. A raised course that is adjacent to the first course and spaced inward from the opposite edges is also formed. In addition, a second course that extend between the opposite edges of the textile element is formed. End areas of the second course are adjacent to the first course, and a central area of the second course is spaced from the first course by the raised course.

The advantages and features of novelty characterizing aspects of the invention are pointed out with particularity in the appended claims. To gain an improved understanding of the advantages and features of novelty, however, reference may be made to the following descriptive matter and accompanying figures that describe and illustrate various configurations and concepts related to the invention.

FIGURE DESCRIPTIONS

The foregoing Summary and the following Detailed Description will be better understood when read in conjunction with the accompanying figures.

FIG. **1** is a perspective view of an article of apparel.

FIG. **2** is a front elevational view of the article of apparel.

FIG. **3** is a rear elevational view of the article of apparel.

FIGS. **4**A-**4**C are cross-sectional views of a collar of the article of apparel, as defined by section lines **4**A-**4**C in FIG. **3**.

FIG. **5** is a top plan view of a textile element that forms the collar.

FIG. **6** is a bottom plan view of the textile element.

FIGS. **7**A-**7**C are cross-sectional views of the textile element, as defined by section lines **7**A-**7**C in FIG. **5**.

FIGS. **8**A-**8**D are schematic top plan views of a knit structure of the textile element, as defined by areas **8**A-**8**D in FIG. **5**.

FIGS. **9**A-**9**N are top plan views corresponding with FIG. **5** and depicting further configurations of the textile element.

FIG. **10** is a front elevational view of another article of apparel.

FIG. **11** is a cross-sectional view of a portion of the article of apparel depicted in FIG. **10**, as defined by section line **11**-**11** in FIG. **10**.

DETAILED DESCRIPTION

The following discussion and accompanying figures disclose various articles of apparel with creased textile elements.

Apparel Configuration

An article of apparel **100** is depicted in FIGS. **1**-**3** as having a torso region **110** and a pair of arm regions **120**. Torso region **110** corresponds with a torso of a wearer and covers at least a portion of the torso when worn. An upper area of torso region **110** defines a neck opening **111** through which the neck and head of the wearer protrude when apparel **100** is worn. A size of neck opening **111** may be adjusted through use of a conventional button system **112**. Similarly, a lower area of torso region **110** defines a waist opening **113** through which the waist or pelvic area of the wearer protrudes when apparel **100** is worn. Arm regions **120** correspond with arms of the wearer and cover at least a portion of the arms when apparel **100** is worn. Each of arm regions **120** define an arm opening **121** through which the arms protrude when apparel **110** is worn.

Apparel **100** also includes a collar **130** that is secured to torso region **110** adjacent to neck opening **111**. Collar **130** is formed from a textile element that extends in an upward direction from neck opening **111** (i.e., the area where collar **130** is secured to torso region **110** adjacent to neck opening **111**) and then folds over to extend in a downward direction. In order to facilitate the folding of collar **130** in a specific location and also provide other aesthetic benefits, collar **130** defines a crease **131** in a rear area of apparel **100**. As discussed in greater detail below, a knitting process that is utilized to manufacture a textile element forming collar **130** includes the formation of crease **131** through the addition of a raised course within the textile element. As discussed in greater detail below, crease **131** is not a significantly thickened area of collar **130**, but is formed through the addition of a knitted course that imparts an angular or disjointed aspect to collar **130**, thereby defining crease **131**.

Crease **131** is centrally-positioned in the rear area of apparel **100** and extends across only a portion of a width of collar **130**. When apparel **100** is worn, crease **131** is located behind the neck of the wearer and may extend outward from sides of the neck. In general, however, crease **131** has a length that remains behind the neck. Referring to FIGS. **4**A-**4**C, various cross-sections through collar **130** and upper areas of torso region **110** are depicted. Whereas crease **131** is absent in the cross-sections of FIGS. **4**A and **4**C, crease **131** is present in the cross-section of FIG. **4**B. In comparing these cross-sections, areas where crease **131** are absent have a generally rounded or less-distinct fold in collar **130**, whereas crease **131** imparts a generally pointed or otherwise distinct ridge in the fold of collar **130**.

A textile element that forms collar **130** is depicted separate from apparel **100** in FIGS. **5** and **6**. Collar **130** has a generally rectangular configuration that includes a free edge **132**, an attachment edge **133**, and a pair of side edges **134**. Although edges **132**-**134** are depicted as being generally linear, any of edges **132**-**134** may be somewhat rounded or otherwise non-linear. When incorporated into apparel **100**, free edge **132** forms an unsecured end area of collar **130**, whereas attachment edge **133** is secured to torso region **110** adjacent to neck opening **111**. Side edges **134** extend between end areas of each of edges **132** and **133** to form side portions of collar **130**. Although a position and length of crease **131** may vary significantly, as described in greater detail below, crease **131** is

generally spaced from each of edges **132-134** and positioned in a central area of collar **130**. Moreover, crease **131** may also be substantially parallel to each of edges **132** and **133** and substantially perpendicular to side edges **134**. Depending upon the specific shape of collar **130**, however, the position of crease **131** and the geometrical relationships between crease **131** and edges **132-134** may vary significantly.

Collar **130** has an outward-facing surface **135** and an opposite inward-facing surface **136**. Whereas outward-facing surface **135** generally forms an outward-facing portion of collar **130** that is visible from the exterior of apparel **100**, inward-facing surface **136** generally forms an inward-facing portion of collar **130** that is mostly hidden from the exterior of apparel **100**. A majority of surfaces **135** and **136** are generally planar. In the region of crease **131**, however, outward-facing surface **135** forms a protruding area and inward-facing surface **136** forms an indented area. Referring to FIGS. **7A-7C**, various cross-sections through the textile element that forms collar **130** are depicted. In comparing these cross-sections, areas where crease **131** are absent have a generally planar configuration in collar **130**, whereas crease **131** respectively imparts a protruding area and an indented area in surfaces **135** and **136**. Accordingly, crease **131** is not a significantly thickened area of collar **130**, but is an angular or otherwise disjointed area within collar **130**.

Crease **131** facilitates the folding of collar **130** in a specific location. When apparel **100** is worn, crease **131** ensures that collar **130** folds at the location of crease **131**. If collar **130** were folded in a location that is adjacent to neck opening **111**, then collar **130** may lay adjacent to the back of the wearer and exhibit a flat appearance. Conversely, if collar **130** were folded in a location that is adjacent to free edge **132**, then collar **130** may stand overly upright. By placing crease **131** in a particular location relative to edges **132** and **133**, the location at which collar **130** folds may be influenced.

Although a width of collar **131** may vary significantly, a distance between free edge **132** and attachment edge **134** through a center of collar **130** may be approximately 8.26 centimeters (3.25 inches), and the distance between free edge **132** and attachment edge **134** along side edges **134** may be approximately 7.62 centimeters (3.00 inches) In this configuration, approximately 0.64 centimeter (0.25 inches) may be allocated for a seam allowance, which is the portion of collar **130** utilized to join collar **130** to torso region **110**. That is, approximately 7.62 centimeters (3.00 inches) of collar **130** may extend outward from torso region **110**. Given these dimensions, crease **131** may be spaced approximately 4.64 centimeters (1.875 inches) from free edge **132**. More generally, crease **131** may be positioned at approximately 58 percent of a distance between free edge **132** and attachment edge **133**. Although this position is suitable for crease **131**, the position of crease **131** may vary significantly depending upon the style of apparel **100**, the specific structure of apparel **100**, or the aesthetic intended to be imparted by apparel **100**. In other configurations of apparel **100**, therefore, crease **131** may be located anywhere in a range of one-sixth to five-sixths of a distance from free edge **132** to attachment edge **133**. More particularly, crease **131** may be located between (a) one-third and two-thirds of a distance from free edge **132** to attachment edge **133**, (b) one-half and six-tenths of a distance from free edge **132** to attachment edge **133**, or (c) one-half and seven-tenths of a distance from free edge **132** to attachment edge **133**, for example. Accordingly, the specific position of crease **131** relative to edges **132** and **133** may vary significantly.

A length of length of collar **131** (i.e., a distance between side edges **134**) may also vary significantly and may at least partially depend upon the size of apparel **100**. For configurations of apparel **100** intended to be worn by men, the length of collar **131** may vary as follows: (a) for a size of extra-small or small, a distance between side edges **134** may be approximately 40.6 centimeters (16.0 inches), (b) for a size of medium or large, a distance between side edges **134** may be approximately 43.2 centimeters (17.0 inches), (c) for a size of extra-large or 2-extra-large, a distance between side edges **134** may be approximately 45.7 centimeters (18.0 inches), (d) for a size of 3-extra-large or 4-extra-large, a distance between side edges **134** may be approximately 48.3 centimeters (19.0 inches), and (e) for a size of 5-extra-large, a distance between side edges **134** may be approximately 50.8 centimeters (20.0 inches). For each of these sizes, crease **131** may have a length of approximately 11.4 centimeters (4.50 inches). Moreover, the length of crease **131** may be less than one-third of the distance between side edges **134**, but may also be less than one-fourth of the distance between side edges **134**. Although this relative length is suitable for crease **131**, the length of crease **131** may vary significantly depending upon the style of apparel **100**, the specific structure of apparel **100**, or the aesthetic intended to be imparted by apparel **100**. In other configurations of apparel **100**, therefore, crease **131** may have a length anywhere in a range of the entire distance between side edges **134** to one-twentieth of the distance between side edges **134**. Accordingly, the specific position of crease **131** relative to side edges **134** may vary significantly.

In addition to facilitating the folding of collar **130** in a specific location, crease **131** may also provide additional aesthetic benefits. In some articles of apparel, creases may be formed through ironing or other non-permanent methods. Following prolonged wear and exposure to moisture (e.g., precipitation, humidity, perspiration), an ironed crease may diminish. By utilizing a knitting process to form crease **131** as a part of the structure of collar **130**, crease **131** may remain within collar **130** following prolonged wear and exposure to moisture, thereby enhancing the aesthetic properties of apparel **100**.

Manufacturing Process

Collar **130** may, for example, be formed through a flat knitting process. In general, flat knitting is a method for producing knitted textile elements in which the textile is turned periodically (i.e., the textile is knitted from alternating sides). The two sides of the textile (otherwise referred to as faces) are conventionally designated as the right side (i.e., the side that faces outwards, towards the viewer) and the wrong side (i.e., the side that faces inwards, away from the viewer). Although flat knitting provides a suitable manner for forming collar **130**, other types of knitting processes may also be utilized, including wide tube circular knitting, narrow tube circular knit jacquard, single knit circular knit jacquard, double knit circular knit jacquard, and warp knit jacquard, for example.

An advantage of flat knitting over the various other types of knitting is that the flat knitting process may be utilized to form generally three-dimensional structures, as in the area of crease **131**. In contrast with the "flat" terminology in "flat knitting", therefore, non-planar, curved, or otherwise generally three-dimensional structures may be produced through flat-knitting. In addition, flat knitting may be utilized to form areas with different types of stitches and areas with different types or colors of yarns. For example, areas of collar **130** may have a ribbed configuration, whereas other areas may have a non-ribbed configuration. Moreover, areas of collar **130** may be formed from stretch yarns, whereas other areas may be formed from non-stretch yarns. Accordingly, the flat knitting process may be utilized to form a generally three-dimensional

structure having areas with different properties that are produced from combinations of different types of stitches and different types or colors of yarns.

Another advantage of the flat knitting process relates to the overall shape of collar **130** and the configuration of edges **132-134**. More particularly, collar **130** may be knitted to have the shape depicted in FIGS. **5** and **6** without subsequent significant cutting operations because the flat knitting process imparts a generally finished configuration to edges **132-134**. That is, collar **130** may be formed with a defined shape that does not need to be cut from a larger textile element. Unlike textile elements cut from a larger textile element, therefore, edges **132-134** do not need to be finished to prevent unraveling and enhance their aesthetic properties.

The general procedure for knitting collar **130** involves forming a plurality of rows and columns of intermeshed loops, which are conventionally referred to as courses and wales. The courses within collar **130** are rows of needle loops produced by adjacent needles during the knitting cycle, whereas the wales are columns of intermeshed needle loops generally produced by the same needle on successive knitting cycles.

The knit structure of collar **130** is generally too small or fine to be clearly viewed in FIGS. **5** and **6**. In order to show the knit structure in more detail, various areas **8**A-**8**C are defined in FIG. **5** and schematically-depicted in FIGS. **8**A-**8**D. In general, FIG. **8**A depicts an area of collar **130** that is separate from crease **131**, FIG. **8**B depicts an area of collar **130** that corresponds with an end portion of crease **131**, FIG. **8**C depicts an area of collar **130** that corresponds with an central portion of crease **131**, and FIG. **8**D depicts an area of collar **130** that corresponds with an opposite end portion of crease **131**. In each of FIGS. **8**A-**8**D, six courses **141-146** (i.e., horizontal rows) are depicted and the yarns forming each of the six courses are identified as yarns **151-156**. In FIGS. **8**B-**8**D, a raised course **147** that forms crease **131** is depicted and the yarn forming the raised course is identified as yarn **157**. Although not referenced, the various yarns **151-157** form various wales (i.e., vertical columns) in the areas of collar **130** depicted in FIGS. **8**A-**8**D.

Referring to FIG. **8**A, an area of collar **130** that is separate from crease **131** and spaced from crease **131** (e.g., between the end portion of crease **131** and one of side edges **134**) is depicted. In this area, courses **141-146** are substantially parallel to each other. Although not depicted, courses **141-146** may have a length that is sufficient to extend between side edges **134**. That is, courses **141-146** may extend through the entire length of collar **130**. In some configurations of collar **130**, courses **141-146** may extend only partially between side edges **134**.

Referring to FIG. **8**B, the area of collar **130** corresponding with the end portion of crease **131** is depicted. In this area, raised course **147** initiates between courses **143** and **144**. In other words, courses **143** and **144** effectively separate and become non-parallel to permit the introduction of yarn **157**, which forms raised course **147** and effectively forms crease **131**. Whereas yarns **153** and **154** form intermeshed loops with each other in FIG. **8**A, yarns **153** and **154** begin forming intermeshed loops with yarn **157** in FIG. **8**B. As discussed above, crease **131** is not a significantly thickened area of collar **130**, but is formed through the addition of raised course **147** to impart an angular or disjointed aspect to collar **130**.

Referring to FIG. **8**C, the area of collar **130** that corresponds with the central portion of crease **131** is depicted. In this area, courses **141-147** are substantially parallel to each other and raised course **147** (yarn **157**) is positioned between courses **143** and **144** (yarns **153** and **154**). As noted above, raised course **147** effectively forms crease **131**. Whereas courses **143** and **144** were adjacent to each other in the area of FIG. **8**A, courses **143** and **144** are separated by raised course **147** in the area of FIG. **8**C. In effect, therefore, three courses (i.e., courses **143**, **144**, and **147**) are located in an area having sufficient space for two courses (i.e., **143** and **144**). By placing an additional course (i.e., raised course **147**) within this area, collar **130** forms a protruding area on outward-facing surface **135** and forms an indented area on inward-facing surface **136**, thereby forming crease **131**. Accordingly, the introduction of raised course **147** effectively forms crease **131**.

As discussed above, an advantage of flat knitting over various other types of knitting is that the flat knitting process may be utilized to form generally three-dimensional structures, as in the area of crease **131**. Utilizing flat knitting techniques, therefore, the knit structure of collar **130** may be configured to form raised course **147** and define crease **131**. That is, flat knitting techniques may be utilized to form a generally three-dimensional structure (i.e., crease **131**) within collar **130**. In general, therefore, crease **131** extends along raised course **147** and will have a length that is substantially equal to the length of raised course **147**.

In order to enhance the three-dimensional aspect of crease **131** in raised course **147**, yarn **157** may have different properties than yarns **151-156**. For example, yarn **157** may exhibit greater thickness, greater stiffness, or a combination of greater thickness and stiffness than yarns **151-156**. By selecting yarn **157** to have different properties than yarns **151-156**, the degree to which crease **131** forms a protruding area on outward-facing surface **135** and forms an indented area on inward-facing surface **136** may be increased.

Referring to FIG. **8**D, the area of collar **130** corresponding with the opposite end portion of crease **131** is depicted. In this area, raised course **147** terminates between courses **143** and **144**. In other words, courses **143** and **144** effectively come back together and become parallel to permit the removal of yarn **157**. Whereas yarns **153** and **154** form intermeshed loops with yarn **157** in FIG. **8**C, yarns **153** and **154** begin forming intermeshed loops with each other in FIG. **8**D.

A variety of procedures for forming collar **130** with crease **131** may be utilized. In general, however, various courses (e.g., courses **141-143**) are formed between side edges **134**. Raised course **147** is then formed adjacent to course **143**. Whereas courses **141-143** extend between side edges **134**, raised course **147** is spaced inward from side edges **134**. Various additional courses (e.g., courses **144-146**) are formed between side edges **134**. In this procedure, the end areas of courses **143** and **144** are adjacent to each other and form intermeshed loops with each other, but the central areas of courses **143** and **144** are spaced from each other by raised course **147** and form intermeshed loops with raised course **147**.

An example of a suitable flat knitting machine that may be utilized in manufacturing collar **130** is a KH-212 Computerized Full Jacquard Flat Knitting machine, as manufactured by Kauo Heng Precision Machinery Industrial Company, Ltd. of Taiwan. In preparing this flat knitting machine for the manufacture of collar **130**, the number of needles that fit to the length of collar **130** are determined and set. A program relating to the manufacture of collar **130** is then copied to the flat knitting machine. In an example where polyester and elastane yarns are utilized in collar **130**, eight bobbins of the polyester yarn and one bobbin of the elastane yarn are then prepared and placed within feeders. More particularly, two of the polyester yarns may be placed within a first feeder, three of the polyester yarns may be placed within a second feeder, three of

the polyester yarns may be placed within a third feeder, and the one elastane yarn may be placed within the fourth feeder. Once the flat knitting machine is prepared, yarn carriers may move back and forth to make loops on the various sides of collar **130** to form the knit structure. Moreover, the flat knitting machine may, as programmed, define crease **131** by forming raised course **147** between courses **143** and **144**, as discussed above.

In the example discussed above, a majority of collar **130** is formed from polyester. In order to provide stretch and recovery, elastane fibers may also be utilized, which are available from E.I. duPont de Nemours Company under the LYCRA trademark. In addition to or as a substitution for the polyester and elastane yarns, the yarns forming collar **130** (e.g., yarns **151-157**) may include cotton and wool fibers, natural filaments such as silk, and synthetic filaments that include rayon, nylon, and acrylic, for example. The characteristics of the yarns selected for collar **130** depend primarily upon the materials that form the various filaments and fibers of the yarns. Cotton, for example, provides a soft hand, natural aesthetics, and biodegradability. Elastane provides stretch and recovery. Rayon provides high luster and moisture absorption. Wool also provides high moisture absorption, in addition to insulating properties. Polytetrafluoroethylene coatings may provide a low friction contact between collar **130** and the skin. Nylon is a durable and abrasion-resistant material with high strength, and polyester is a hydrophobic material that also provides relatively high durability. Accordingly, the materials comprising the yarns may be selected to impart a variety of physical properties to collar **130**.

Further Collar and Apparel Configurations

Crease **131** is discussed above as being spaced from edges **132-134**, parallel to free edge **132**, centrally-located, and generally linear, for example. In further configurations of collar **130**, crease **131** may exhibit a variety of other shapes, locations, lengths, etc. As examples, crease **131** may be adjacent to free edge **132** (see FIG. **9**A), exhibit significantly longer lengths (see FIG. **9**B) or shorter lengths (see FIG. **9**C), have a non-continuous structure (see FIG. **9**D), be non-linear (see FIG. **9**E) and/or nonparallel to free edge **132** (see FIG. **9**F). Moreover, collar **130** may also incorporate multiple creases **131** (see FIG. **9**G). Various aspects relating to collar **130** may also vary. As examples, collar **130** may have a curved configuration (see FIG. **9**H), a structure wherein areas adjacent to side edges **134** have greater width than a central area (see FIG. **9**I), or a non-regular aspect (see FIG. **9**J). In further configurations, collar **130** may have a variety of shapes and crease **131** may extend between side edges **134** (see FIGS. **9**K-**9**N). Accordingly, various aspects relating to collar **130** and crease **131** may vary significantly from the configuration discussed above.

Although apparel **100** has the configuration of a short-sleeved shirt, particularly, a polo shirt, apparel **100** may also have the configuration of various other shirt-type garments, including long-sleeved shirts, tank tops, undershirts, jackets, or coats. That is, the concepts related to collar **130** and crease **131** may also be incorporated into a variety of other shirt-type garments. Additionally, the concepts may be incorporated into a variety of other types of garments, including hats, footwear, and gloves, for example. Accordingly, the concepts discussed above with respect to apparel **100** may also be applied to any type of garment that incorporates a crease or crease-like structure.

As a further example of the manner in which the concepts related to creased textile elements may be incorporated into other types of garments, an article of apparel **200** is depicted in FIG. **10** as having the configuration of a pair of pants. Apparel **200** includes a pelvic region **210** and a pair of leg regions **220** that extend outward from pelvic region **210**. Each of pelvic region **210** and leg regions **220** are formed from textile elements that define various creases **231**. As with crease **131**, creases **231** may be knitted into the structure of the textile elements that form apparel **200**, potentially with flat knitting. Creases **231** may also form protruding areas on the exterior surface of apparel **200** and indented areas on the interior surface of apparel **200**. In general, therefore, creases similar to creases **131** may be incorporated into a variety of apparel types.

The invention is disclosed above and in the accompanying figures with reference to a variety of configurations. The purpose served by the disclosure, however, is to provide an example of the various features and concepts related to the invention, not to limit the scope of the invention. One skilled in the relevant art will recognize that numerous variations and modifications may be made to the configurations described above without departing from the scope of the present invention, as defined by the appended claims.

The invention claimed is:

1. An article of apparel comprising:

a torso region for covering at least a portion of a torso of a wearer, the torso region defining a neck opening and an opposite waist opening;

a pair of arm regions for covering at least a portion of arms of the wearer, the arm regions extending outward from the torso region; and

a collar extending from the torso region and positioned adjacent to the neck opening, the collar being formed from a knitted textile element that defines an attachment edge that is joined to the torso region, an opposite free edge, and a pair of side edges extending from the attachment edge to the free edge, and the collar having a crease formed from a raised course located between two other courses, the raised course having a length that is (a) less than lengths of the two other courses and (b) less than one-third of a distance between the side edges.

2. The article of apparel recited in claim **1**, wherein the raised course is substantially parallel to the free edge.

3. The article of apparel recited in claim **2**, wherein the raised course is substantially perpendicular to the side edges.

4. The article of apparel recited in claim **1**, wherein the raised course is centered between the side edges.

5. The article of apparel recited in claim **4**, wherein the raised course is located between one-third and two-thirds of a distance from the free edge to the attachment edge.

6. The article of apparel recited in claim **4**, wherein the raised course is located between one-half and six-tenths of a distance from the free edge to the attachment edge.

7. The article of apparel recited in claim **1**, wherein the textile element has a first surface and an opposite second surface, the first surface defining a protruding area proximal to the raised course, and the second surface defining an indented area proximal to the raised course.

8. An article of apparel comprising:

a torso region for covering at least a portion of a torso of a wearer, the torso region defining a neck opening and an opposite waist opening;

a pair of arm regions for covering at least a portion of arms of the wearer, the arm regions extending outward from the torso region; and

a collar extending from the torso region and positioned adjacent to the neck opening, the collar defining an attachment edge that is joined to the torso region, an

opposite free edge, and a pair of side edges extending from the attachment edge to the free edge, and the collar having a crease that is:

(a) substantially parallel to the free edge,

(b) located between one-half and six-tenths of a distance from the free edge to the attachment edge,

(c) centered between the side edges, and

(d) formed to have a length that is less than one-third of a distance between the side edges,

the crease being formed from a raised course located between two other courses, the crease having a length that is less than lengths of the two other courses.

9. The article of apparel recited in claim **8**, wherein the collar is formed from a knitted textile element.

10. The article of apparel recited in claim **8**, wherein the length of the crease is substantially equal to the length of the raised course.

11. The article of apparel recited in claim **8**, wherein the collar has a first surface and an opposite second surface, the first surface defining a protruding area proximal to the raised course, and the second surface defining an indented area proximal to the raised course.

12. An article of apparel comprising:

a torso region for covering at least a portion of a torso of a wearer, the torso region defining a neck opening and an opposite waist opening;

a pair of arm regions for covering at least a portion of arms of the wearer, the arm regions extending outward from the torso region; and

a collar extending from the torso region and positioned adjacent to the neck opening, the collar being formed from a knitted textile element defining an attachment edge that is joined to the torso region, an opposite free edge, and a pair of side edges extending from the attachment edge to the free edge, and the collar having a crease formed from a raised course located between two other courses, the raised course having a length that is less than lengths of the two other courses, the raised course being located between and separating the two other courses, and the two other courses being joined to each other between opposite ends of the raised course and the side edges.

13. The article of apparel recited in claim **12**, wherein the raised course is substantially parallel to the free edge.

14. The article of apparel recited in claim **13**, wherein the raised course is substantially perpendicular to the side edges.

15. The article of apparel recited in claim **12**, wherein the raised course is centered between the side edges.

16. The article of apparel recited in claim **15**, wherein the raised course is located between one-half and six-tenths of a distance from the free edge to the attachment edge.

17. The article of apparel recited in claim **12**, wherein a length of the raised course is less than one-third of a distance between the side edges.

18. The article of apparel recited in claim **12**, wherein the textile element has a first surface and an opposite second surface, the first surface defining a protruding area proximal to the raised course, and the second surface defining an indented area proximal to the raised course.

19. An article of apparel comprising:

a torso region for covering at least a portion of a torso of a wearer, the torso region defining a neck opening and an opposite waist opening;

a pair of arm regions for covering at least a portion of arms of the wearer, the arm regions extending outward from the torso region; and

a collar extending from the torso region and positioned adjacent to the neck opening, the collar being formed from a knitted textile element that defines an attachment edge that is joined to the torso region, an opposite free edge, and a pair of side edges extending from the attachment edge to the free edge, and the collar having a crease formed from a raised course located between two other courses, the raised course having a length that is less than lengths of the two other courses, the raised course being spaced inward from the side edges, and the two other courses extending to the side edges.

20. The article of apparel recited in claim **19**, wherein the raised course is substantially parallel to the free edge.

21. The article of apparel recited in claim **20**, wherein the raised course is substantially perpendicular to the side edges.

22. The article of apparel recited in claim **19**, wherein the raised course is centered between the side edges.

23. The article of apparel recited in claim **22**, wherein the raised course is located between one-half and six-tenths of a distance from the free edge to the attachment edge.

24. The article of apparel recited in claim **19**, wherein a length of the raised course is less than one-third of a distance between the side edges.

25. The article of apparel recited in claim **19**, wherein the textile element has a first surface and an opposite second surface, the first surface defining a protruding area proximal to the raised course, and the second surface defining an indented area proximal to the raised course.

26. An article of apparel comprising:

a torso region for covering at least a portion of a torso of a wearer, the torso region defining a neck opening and an opposite waist opening;

a pair of arm regions for covering at least a portion of arms of the wearer, the arm regions extending outward from the torso region; and

a collar extending from the torso region and positioned adjacent to the neck opening, the collar defining an attachment edge that is joined to the torso region, an opposite free edge, and a pair of side edges extending from the attachment edge to the free edge, and the collar having a crease that is:

(a) substantially parallel to the free edge,

(b) centered between the side edges, and

(c) formed to have a length that is less than one-third of a distance between the side edges,

the crease being formed from a raised course located between two other courses, the crease having a length that is less than lengths of the two other courses.

27. The article of apparel recited in claim **26**, wherein the collar is formed from a knitted textile element.

28. The article of apparel recited in claim **26**, wherein the length of the crease is substantially equal to the length of the raised course.

29. The article of apparel recited in claim **26**, wherein the collar has a first surface and an opposite second surface, the first surface defining a protruding area proximal to the raised course, and the second surface defining an indented area proximal to the raised course.

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